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Sul	bstitute for form 1449/PT	5			Complete if Known
				Application Number	10/629,370
18	NFORMATIC	N DI	SCLOSURE	Filing Date	July 29, 2003
S	TATEMENT	BY A	APPLICANT	First Named Inventor	William S. Becker
				Art Unit	N/A
	(use as many	sheets as	necessary)	Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	27611/38403A

			U.S. PA	TENT DOCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevan
Initials*	No.	Number-Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Figures Appear
-/	V	US-591,962	10-19-1897	F. Evison	
	<u>''</u>	US-953,891	04-05-1910	Atkins	
		US-974,995	11-08-1910	Schies	
		US-1,100,332	06-16-1914	Smith	
	·/	US-1,586,914	06-01-1926	Palm	
	·/	US-1,697,574	01-01-1929	Savonius	
	<u> </u>	US-1,744,924	01-28-1930	Sargent	
	<u> </u>	US-1,835,018	12-08-1931	Darrieus	
	<b>V</b>	US-2,020,900	11-12-1935	Methvin .	
	<u> </u>	US-3,856,432	12-24-1974	Campagnuolo et al.	
		US-3,918,839	11-11-1975	Blackwell et al.	
	/	US-4,004,861	01-25-1977	Soules	
	$\checkmark$	US-4,112,311	09-05-1978	Theyse	
	1	US-4,168,439	09-18-1979	Palma	
	_/	US-4,204,805	05-27-1980	Bolie	
1	ン	US-4,293,274	10-06-1981	Gilman	
V		US-4,334,823	06-15-1982	Sharp	
'λι		US-5,425,619	06-20-1995	Aylor	
$\sim 00$		US-6,242,818	06-05-2001	Smedley	

		FOREI	GN PATENT	DOCUMENTS		
Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,	Г
Initials*	nitials* No.1	Country Code <sup>3</sup> -Nurriber <sup>4</sup> -Kind Code <sup>6</sup> (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	┲╸
M		WO-WO 81/01443-A1	05-28-1981	Joutsiniemi		Т
1, 4		WO-WO 99/04164-A1	01-28-1999	Jaakkola		
W 11		EP-0 040 193-B1	07-04-1984	Joutsiniemi		П
V 1 1/2		JP-60-090992	05-22-1985	Moriaki		×
28 R		DE-DT 25 40 757-A1	08-04-1976	Blackwell et al.		×
νν. <sub>νν</sub>		FI-65940	09-04-1928	Savonius		×
47 1		CA-1,236,030	05-03-1988	Joutsiniemi		
11 1	_	FR-2,295,259	07-16-1976	Simion		×
W 11		FR-1 021 619	02-20-1953	Dondad		×
V M		FR-961,999	05-26-1950	Courtel		x
M "		PL-59680	03-15-1957	Jagodzinski		×
W M		DE-187865	06-25-1906	Depta		x

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. ² Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¹ For Japanese patent documents, the Indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁴ Applicant is to place a check mark here if English language Translation is attached.

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<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449A/B/PTO

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## **INFORMATION DISCLOSURE** STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of

	Complete if Known
Application Number	10/629,370-Conf. #6254
Filing Date	July 29, 2003
First Named Inventor	William S. Becker
Art Unit	2834
Examiner Name	Not Yet Assigned
Attorney Docket Number	27611/38403A

Examiner Initials*	Cile No.1	Document Number  Number-Kind Code <sup>2</sup> ( if known)	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
79	Α	US-D300,932	05-02-1989	Sikes	
1					

U.S. PATENT DOCUMENTS

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F	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages	١.
Examiner Initials*	No.1	Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Date MM-DD-YYYY	Applicant of Cited Document	or Relevant Figures Appear	
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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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<sup>&#</sup>x27;Applicant's unique citation designation number (optional). 'Applicant is to place a check mark here if English language Translation is attached.



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Substi	tute for form 1449/F	то			Complete if Known	
				Application Number	10/629,370	
IN	FORMATI	ON DISC	CLOSURE	Filing Date	July 29, 2003	
ST	ATEMEN	T BY AP	PLICANT	First Named Inventor	William S. Becker	
	•			Art Unit	N/A	
	(use as mar	y sheets as nec	essary)	Examiner Name	Not Yet Assigned	
Sheet	2	of	2	Attorney Docket Number	27611/38403A	

	NON PATENT LITERATURE DOCUMENTS	
Examiner		Τ.
Initials	No. magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
$\mathcal{M}$	Furze, J., "Stealth Wind Turbines: Designs and Technologies to Reduce Visual Pollution,"	
<del>// \                                  </del>	Refocus, Mar/Apr 2003, http://www.re-focus.net/mar/2002_2.html. Printed May 9, 2002	1_
- 77	"Wind Power," Von Nostraud's "Scientific Encyclopedia," 8th Ed.	
W	"Jaspira-tuuliturbiinit," Sheild Jaspira tuuliturbiinit, http://www.shield.fi/finnish/jaspira.html. Printed May 9, 2002	İ
1 4/2	"Mission Statement of Shield Ltd.," Shield Ltd SunFin Solar Collectors & Absorbers,	
_ / (	http://www.shield.fi/mission.html. Printed May 9, 2002	1
W	"Jaspira Turbine, World Wide Patented Innovation," Shield Ltd SunFin Solar Collectors & Absorbers, http://www/shield.fi/turbine.html. Printed May 9, 2002	
אויס ו	Shonfield, K., "Green Hopes Gone With the Wind," The Architects' Journal, April 5, 2001.	+
m	Refocus Magazine-The International Renewable Energy Magazine, various articles, Mar/Apr 2002.	
	"Small Wind Turbines: The Unsung Heroes of the Wind Industry," Refocus, http://www.re-focus.net/mar2002_3.html. Printed May 9, 2002	
	Wakui, T., Tanzawa, Y., Hashizume, T., Outa, E., Usui, A., "Optimum Method of Operataing	$\top$
M	the Wind Turbine-Generator Systems Matching the Wind Condition and Wind Turbine Type,"	ł
11	Proceedings of the World Renewable Energy Congress-VI, Vol. IV, (2000-7), pp. 2348-2351.	1
ΛΛ.	Wakui, T., Hashizume, T., Outa, E., "Operating Methods of Wind Turbine-Generator Systems	†
171	with a Darrieus Rotor Considering Conformability to Wind Conditions." Proceedings of the 3rd	1
(.)	ASME/JSME Joint Fluids Engineering Conference, FEDSM99-7821, (1999-7), pp. 1-9.	
ĭΛ	Wakui, T., Hashizume, T., Outa, E., " Design of a Wind Turbine-Generator system Considering	
181	the Conformability to Wind Velocity Fluctuations," Proceedings of the Renewable and	_
1111	Advanced Energy Systems for the 21st Century, RAES99-7717, (1999-4), pp. 1-6.	1
\ \ \ \ \ \	Wakui, T., Yamaguchi, K., Hashizume, T., Outa, E., Tanzawa, Y., "Effect of Operating	1
$\mathcal{N}V$	Methods of Wind Turbine Generator System on Net Power Extraction Under Wind Velocity	
_##_	Fluctuations in Fields," Renewable Energy, 16, (1998), pp. 843-846.	1
V	Tanzawa, Y., Hashizume, T., Outa, E., Terashima, Y., Machiyama, T., "Dynamic	
M I	Characteristics of the Self-Controlled Darrieus-Savonius Hybrid Wind Turbine System,"	1
~A()	Proceedings of the CSPE-JSME-ASME Internation Conference on Power Engineering, Vol. I,	1
	(1995), pp. 115-121.	
_∧ <i>∧</i> /	. Machiyama, T., Terashima, Y., Hashizume, T., Outa, E., "A Way for Field Application of	$\top$
<i>'XX</i> [	Darrieus Wind Turbine by Installing Savonius Rotor and Controlled Generator Load,"	
,	Proceedings of the ASME Solar Engineering - 1987, Vol. I, (1987), pp. 217-225.	1
$\mathfrak{M}$	Windside Introduction, http://www.windside.com/painik/etusivu.htm. Printed April 25, 2002.	
MM	Windside in Use, http://www.winside.com/wsinuse/wsinuse.htm. Printed April 25, 2002.	Π
MY VII	Windside Models, http://www.windside.com/models/models.htm. Printed April 25, 2002.	E
$^{\prime\prime}\gamma\gamma$	Windside Technical Information, http://www.windside.com/technic/technical.htm. Printed April 25, 2002.	÷
MYNT	Moffett, "Can Windy City Live Up to its Reputation?" Chicago Sun-Times.	<b>†</b>
	http://www.suntimes.com/output/news/cst-nws-wind11.html. Printed June 13, 2003.	1
V 11 /A/7	Field Museum Wind Turbine Booklet.	<del>                                     </del>

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	U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number-Kind Code <sup>2</sup> ( if known)				
1/2		US-4,659,940	04-21-1987	Shepard		
(X) (X)		US-4,684,817	08-04-1987	Goldwater		
XYV		US-5,760,515	06-02-1998	Burns		
770						

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> -Number Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	۳	
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M		International Search Report for PCT/US03/23632 dated May 21, 2004.				

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Examiner Signature	Julia	(20174/17	Date Considered	05/02	05

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